



**FIGURE 1A**

CGC GGC TGT CGG AGC AAA CGC CCC CCC AGG TTG TTC TAG CGT GTG CAG CGG CTA GCT	60
GAT TGA TTG TCT TCT GTG ATA TAT CCA GAG CTC GTG TTT TGT GGT TTG TGG TTT GTG GTT	120
TGT GCT TGG ATT GTT GAT GTG CTA ATT CGC GGC GTT ACA AGA TCA CTG CTG GAT TGA TAT	180
TGA GTT GTG CCT CGG CTG TGC TGG CTG TGT GAT TCT CTC CTC GTC GTG ATC GAT	240
ATG GAG ATT GTT GCA GTA GAT CAG GAG GGA GCT CGT GTT GTT GGG ACC AAC TGT ATG CTT	300
M E I V A V D Q E G A R V V G T N C M L	20
GCT CGT GGT GGA ACT GGT GCT GTA GCG CCA GTG TTG GAG CTG ACA GCG ACG CCT CGT CAG	360
A R G G T G A V A P V L E L T A T P R Q	40
GAT GCA GCC GCT GAA GCT GGT GTA GAC GAA CCG GCA CAA CAC CAA TGC GAG CAT TTC TCC	420
D A A E A G V D E P A Q H Q C E H F S	60
ATA AGA GGG TAT GTT GCT CTT CTT CAG AAG AAG GAT CCA AAA TTC TGC TCT CTA TCT CGG	480
I R G Y V A L L Q K K D P K F C S L S R	80
ATT TTC CAT GAC CAG AAA AAA TGT GAT GAA CAC AAA GCT AGT TCA AGC CCA TTT TCT GTC GAT	540
I F H D Q K K C D E H K A S S S P F S V	100
GCA AAG TTT CGA CGA TGG GAT TGC TCG AAG TGC TTG GAT AAG TTG AAA ACT TCA GAT AAT	600
A K F R R W D C S K C L D K L K T S D N	120
GGA ACA GCA CCA AGA ACT CTT CCC GCA AAG CAG AAT GGC ACA AGT GAT GGT TGC TCC ATC	660
G T A P R T L P A K Q N G T S D G C S I	140



**FIGURE 1B**

T	F	V	R	S	T	F	V	P	A	S	V	G	S	Q	K	V	S	P	S	160
T	Q	S	S	Q	G	K	N	A	D	R	S	T	L	P	K	S	V	Q	E	180
G	N	D	S	K	C	N	A	P	S	G	K	N	G	A	A	E	A	N	T	200
D	S	P	M	K	D	L	Q	G	P	A	Q	N	Y	D	V	A	A	N	V	220
S	E	D	N	T	S	V	D	V	G	A	L	P	E	V	P	Q	I	T	W	240
H	I	E	V	N	G	A	D	Q	P	P	S	T	P	K	L	S	E	V	V	260
L	K	R	N	E	D	E	N	G	K	T	E	E	T	L	V	A	E	Q	C	280
N	L	T	K	D	P	N	P	M	S	G	K	E	R	D	Q	V	A	E	Q	300

ACA TTT GTT CGG AGC ACT TTT GTG CCT GCT AGT GAT GTC CAA AAA GTG TCT CCT AGC 720

GGC AAT GAC TCC AAA TGC AAT GCG CCT TCT GGC AAG AAT GGA GCT GCT GAG GCC AAT ACT 840

GAT TCA CCA ATG AAA GAT TTG CAA GGG CCA GCC CAA AAT TAT GAT GTG GCA GCA AAT GTC 900

TCT GAG GAC AAC ACT TCT GTT GAT GTT GGG GCT TTA CCT GAA GTT CCC CAG ATT ACA TGG 960

CAC ATA GAA GTA ATG GGT GCA GAT CAA CCT CCA TCC ACT CCA AAA CTT TCT GAA GTG GTC 1020

CTC AAA AGA AAT GAA GAT GAA AAT GGA AAA ACT GAA GAG ACT CTT GTT GCT GAG CAG TGC 1080

AAT TTG ACC AAA GAT CCT AAC CCA ATG TCT GGA AAG GAA CGT GAT CAG GTT GCT GAG CAG 1140



FIGURE 1C

TGC AAT TTG ACC AAA GAT CCG AAA CCA GTG TCT GGG CAG AAA TGT GAG CAG ATC TGC AAT 1200  
C N L T K D P K P V S G Q K C E Q I C N 320

GAG CCA TGT GAA GAA GTT CTC AAA AGA AGC TCC AAA TCT AAG AGG AAG ACG GAT AAG 1260  
E P C E E V V L K R S S K R K T D K 340

AAG TTG ATG AAG CAG CAG CAC AGC AAG AAA CGC ACT GCC CAG GCT GAT GTT TCA GAT 1320  
K L M K Q H S K R T A Q A D V S D 360

GCA AAG CTT TGT CGG AGA AAG CCA AAA AAG GTG CGG CTT CTA TCA GAA ATT ATA AAT GCT 1380  
A K L C R R K P K V R L L S E I I N A 380

AAC CAG GTT GAG GAT TCT AGA AGT GAC GAA GTT CAT CGT GAA AAT GCC GCT GAT CCC TGT 1440  
N Q V E D S R S D E V H R E N A A D P C 400

GAG GAT GAT AGA AGT ACC ATC CCG GTC CCG ATG GAA GTA AGC ATG GAT ATT CCT GTT AGC 1500  
E D D R S T I P V P M E V S M D I P V S 420

AAC CAT ACA GTG GGA GAA GAT GGG TTA AAA TCA AGT AAG AAC AAG ACA AAA CGC AAA TAC 1560  
N H T V G E D G L K S S K N K T K R K Y 440

TCT GAT GTT GTA GAT GGA TCA TCA CTT ATG AAC TGG CTG AAT GGA AAA AAG AAA AGA 1620  
S D V V D G S S L M N W L N G K K R 460



**FIGURE 1D**

ACT GGA AGT GTG CAT CAC ACA GTT GCT CAT CCA GCT GGG AAT TTG AGC AAC AAA AAA GTG 1680  
T G S V H H T V A H P A G N L S N K K V 480

ACA CCC ACT GCG AGT ACT CAG CAT GAT GAT GAG AAT GAT ACT GAA AAT GGT CTT GAC ACA 1740  
T P T A S T Q H D D E N D T E N G L D T 500

AAT ATG CAT AAG ACA GAT GTC TGT CAG CAT GTA TCA GAA ATC TCC ACA CAG AGG TGC TCA 1800  
N M H K T D V C Q H V S E I S T Q R C S 520

TCA AAG GGG AAA ACA GCG GGT TTG AGT AAG GGG AAA ACA CAT TCA GCT AGT ACC AAA 1860  
S K G K T A G L S K G K T H S A A S T K 540

TAT GGT GGT GAA AGC ACC AGA AAT GGT CAG AAC ATA CAT GTA CTC AGC GCA GAA GAT CAA 1920  
Y G G E S T R N G Q N I H V L S A E D Q 560

TGC CAG ATG GAA ACC AAC TCT GTT CTG AGT CAC TCG GCA AAG GTT TCT CCA GCT GAG 1980  
C Q M E T E N S V L S H S A K V S P A E 580

CAT GAT ATC CAA ATT ATG TCT GAC CTT CAT GAG CAG AGT CTA CCC AAG AAG AAA AAG AAG 2040

H D I Q I M S D L H E Q S L P K K K K K 600



FIGURE 1E

CAA AAA CTT GAA GTG ACT CGT GAA AAA CAG ACC ATG ATA GAT GAC ATC CCC ATG GAT ATT 2100  
Q K L E V T R E K Q T M I D D I P M D I 620

GTT GAA CTG CTA GCT AAA AAC CAG CAT GAG AGG CAG CTT ATG ACT GAG ACT GAT TGT TCT 2160  
V E L L A K N Q H E R Q L M T E T D C S 640

GAC ATC AAC CGT ATT CAA TCC AAG ACA ACT GCT GAT GAT TGT GTA ATA GTA GCT GCC 2220  
D I N R I Q S K T T A D D C V I V A A 660

AAG GAT GGT TCA GAT TAT GCA TCA AGT GTG TTT GAC ACT AAT TCC CAA CAG AAG TCC TTG 2280  
K D G S D Y A S S V F D T N S Q Q K S L 680

GCA TCC CAA AGT ACA CAG AAG GAG TTA CAG GGT CAT TTG GCA TTG ACC ACA CAA GAG TCT 2340  
A S Q S T Q K E L Q G H L A L T T Q E S 700

CCA CAT CCT CAG AAC TTT CAG TCT ACT CAG GAA CAG CAG ACA CAT TTG CGG ATG GAA GAA 2400  
P H P Q N F Q S T Q E Q T H L R M E E 720

ATG GTC ACT ATT GCT GCA AGC TCA CCA CTA TTT TCA CAT CAT GAT GAT CAG TAT ATT GCT 2460  
M V T I A S S P L F S H H D D Q Y I A 740

GAA GCA CCA ACT GAA CAT TGG GGC CGT AAG GAC GCA AAG AAG CTA ACG TGG GAG CAA TTT 2520  
E A P T E H W G R K D A K K L T W E Q F 760



**FIGURE 1F**

AAG GCC ACT ACA AGA AAT TCT CCA GCA GCA ACA TGT GGT GCT CAA TTT AGA CCT GGT ATC 2580  
K A T T R N S P A A T C G A Q F R P G I 780

CAA GCA GTT GAC TTG ACT TCT ACT CAT GTC ATG GGA TCT TCC AGC AAT TAT GCA TCT CGC CAT GCA 2640  
Q A V D L T S T H V M G S S N Y A S R 800

CAA CCA GTA ATT GCG CCA CTG GAC CGC TAT GCT GAA AGA GCG GTT AAC CAG GTC CAT GCA 2700  
Q P V I A P L D R Y A E R A V N Q V H A 820

AGA AAT TTT CCA AGC ACA ATA GCA ACC ATG GAA GCG AGT AAG TTA TGT GAT CGG AGA AAT 2760  
R N F P S T I A T M E A S K L C D R R N 840

GCT GGA CAA GTA GTC TTG TAT CCT AAA GAA TCC ATG CCT GCG ACG CAT CTT CTG AGA ATG 2820  
A G Q V V L Y P K E S M P A T H L L R M 860

ATG GAT CCA TCA ACA TTA GCA AGC TTC CCC AAC TAT GGA ACT TCT AGC AGG AAC CAG CAG ATG 2880  
M D P S T L A S F P N Y G T S S R N Q M 880

GAG TCT CAA CTT CAT AAT TCT CAG TAT GCA CAT AAT CAG TAC AAA GGA TCA ACC AGC ACA 2940  
E S Q L H N S Q Y A H N Q Y K G S T S T 900

TCA TAT GGC AGT AAC CTG AAT GGA AAG ATT CCA TTG ACA TTC GAA GAC TTA TCA CGG CAT 3000  
S Y G S N L N G K I P L T F E D L S R H 920



FIGURE 1G

CAG CTG CAT GAT CTG CAC AGA CCT TTA CGC CCA CAT CCT AGA GTT GGT GTG CTT GGC TCC 3060  
Q L H D L H R P L R P H P R V G V L G S 940

TTC CTG CAG AAG GAA ATT GCA AAC TGG TCG GAG AAC TGT GGC ACA CAA TCT GGT TAT AAG 3120  
L L Q K E I A N W S E N C G T Q S G Y K 960

TTA GGA GTG TCA ACA GGA ATA ACA TCG CAT CAG ATG AAC AGA AAG GAA CAT TTT GAA GCC 3180  
L G V S T G I T S H Q M N R K E H F E A 980

CTG AAT TCT GGA ATG TTT TCA GCA AAA TGG AAT GCA TTG CAG TTG GGT TCT GTT AGC TCC 3240  
L N S G M F S A K W N A L Q L G S V S S 1000

AGT GCA GAT TTT TTA TCA GCG AGG AAC AGC ATA GCT CAA TCT TGG ACC AGA GGC AAG GGT 3300  
S A D F L S A R N S I A Q S W T R G K G 1020

AAA ATG GTT CAT CCC TTG GAT CGG TTT GTG AGA CAG GAT ATC TGT ATA ACT AAC AAG AAC 3360  
K M V H P L D R F V R Q D I C I T N K N 1040

CCA GCT GAT TTT ACT ACA ATC AGT AAC GAT AAC GAG TAT ATG GAT TAC CGC TGA AGC AGA 3420  
P A D F T T I S N D N E Y M D Y R \* 1058

AAG TGG TGT GCA TAA TTC CTG AAC ATT TAC AAT CAT ACA TTT CAT CTT TAT GGC GGC AAA 3480  
TAG TCA TAC TGT AAG AGG AGG GCT TTG CTG GAT CTG CTG TAA GGC TTC TTG TAA GTT GTG 3540  
GAT GCC CCA TTT TCT GGA TGG GAA CCT GCC AGA CAG TGA ACA AGG GCT TTG CAA GGT GCA 3600  
GCA TCC GGT TTT TGT TTT GCC AGT CCA AGA AAC GTC CTC CTG TTA CTT TGT AGT TGT ACT 3660



**FIGURE 1H**

CAT ACT AGT GCG CTT GTT TGT ACA AGG AGA AAT GTG TAA CCT TGT TGA AAA AAA TGT CTC 3720  
CCC CAT TTT GTA ATT ACC ATA AGG AGG TTT ATA GTG TTG TGA GCT GTG TGT GAC TGA CGG 3780  
CGA GAA ATG GTT TTG TCG GTG TTA AGG TTG AAA CGA CTA GCT CTC GTT ATC AAT GTG TTG 3840  
TAA ACT TCT AGA TTG ATG TGT TAC CTT ACT CTT GAA GTC AAC ACC GGA GAA TTT AC 3896